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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/282,285  | 03/31/1999  | DAVID FEINLEIB       | MSI-288US           | 8387             |
| 22801   | 7590        | 06/04/2004           | EXAMINER            |                  |
| LEE & HAYES PLLC<br>421 W RIVERSIDE AVENUE SUITE 500<br>SPOKANE, WA 99201 |             |                      | HUYNH, SON P        |                  |
|   |             | ART UNIT             | PAPER NUMBER        |                  |
|   |             | 2611                 |                     |                  |

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/282,285             | FEINLEIB ET AL.     |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Son P Huynh            | 2611                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 April 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-43 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 31 March 1999 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/2/04 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-43 have been considered but are moot in view of the new ground(s) of rejection.

Declaration Under 37 C.F.R § 1.132 is acknowledged.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1 –6, 8-13, 15-17, 19-23, 25, 28, 30-36, 38-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoff et al. (US 6,240,555) and in view of Birdwell et al. (US 6,108,706).

Regarding claim 1, Shoff et al. teaches a method of synchronizing streaming content with enhancing content (supplemental interactive content) comprising: receiving an announcement data structure 48 containing information 58 specifying how to receive upcoming multicast enhancing content, the data structure 48 being sent at a time prior to sending the enhancing content, the enhancing content associated with the streaming content (see figure 3 and col. 7, lines 1-8); receiving the streaming content; receiving the enhancing content according to the information contained in the data structure 48 and at a time in synchronization with the streaming content; and enhancing the streaming content with the enhancing content (see figures 6-8C). However Shoff et al. does not specifically disclose the data structure is received on a monitored address containing information specifying when to receive upcoming enhancing content.

Birdwell teaches receiving an announcement on a monitored address (monitoring the multicast address – col. 2, line 6+) containing information specifying how and when

(broadcast locator, identity of the content server that will be serving the data for the transmission, a time of transmission, a broadcast protocol, etc. col. 1, line 65-col. 2, line 32; col. 5, line 10+) to receive upcoming data transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shoff to use the teaching as taught by Birdwell in order to increase security of the receiver and notify user in advance the time to receive data transmission.

Regarding claim 2, Shoff et al. in view of Birdwell teaches a method as discussed in the rejection of claim 1. Birdwell further teaches the announcement contains parameters selected from a group comprising: a broadcast locator, a time of transmission, a broadcast protocol, etc. (col. 1, line 65+).

Regarding claim 3, Shoff in view of Birdwell teaches a method as discussed in the rejection of claim 1. Shoff further discloses when the viewer tunes to a particular channel, the viewer computing unit consults the EPG to determine if the present program is interactive. If it is, the viewer-computing unit launches an interactive support module, such as Internet browser. The supplemental content can be automatically displayed in response to launching the Interactive browser (col. 3, lines 14-25; col. 9, line 62+). The digital data defines a display layout prescribing how the supplemental content and the video program are to appear in relation to one another when displayed on the screen. The digital data further defines timing information to synchronize presentation of the supplemental content with the video content program (col. 10, line

1+). Necessarily, the enhancing content comprises triggers (for automatically activate the target resource –col. 9, line 62) and data files, the method comprising:  
receiving the data files; and  
receiving the triggers at times in synchronization with the streaming content (program content), the triggers causing operation involving the data files in order to timely introduce the enhancing content with the streaming content (timely introduce supplemental content with program content).

Regarding claim 4, Shoff et al. discloses the enhancing content further comprising target resource (dependency files) that contain instructions to present content contained in the data files, the method further comprising delivering the data files together with the dependency files in a “cabinet (CAB) files format” (see col. 9, line 65 – col. 10, line 17).

Regarding claim 5, Shoff et al. discloses the receiving comprises receiving the streaming content and the enhancing content in a composite stream of one source (see col. 10, lines 18-24 or figure 4).

Regarding claim 6, Shoff et al. discloses the receiving comprises receiving the streaming content from a first source and receiving enhancing content from a second source different from the first source (see figure 4 and col. 7, lines 51-55).

Regarding claim 8, the limitations of claim direct toward embody the method of claim 1 in a "computer readable medium". It would have been obvious to embody the procedure of Shoff and Birdwell discussed with respect to claim 1 in a "computer readable medium" in order that a processor could automatically perform the instruction.

Regarding claim 9, Shoff et al. discloses a method for synchronizing streaming content with enhancing content comprising:

sending data structure 48 comprising URL (see figure 3); Shoff further discloses the digital data in the target resource dynamically change the display layout (see figures 6-8C). And the author of a target resource can use the new tags and extension attributes to formulate how and when the browser renders the supplemental content along with the continuous data stream see (col. 13, lines 21-26) wherein the tags comprises triggers (see table 2 col. 13, line 50-col. 14, line 40). The viewer computing unit can automatically activate the target resource to receive supplemental content (col. 9, line 62+. Necessarily, the announcements as sent from the first address (22) to a second address (computing unit), the triggers are processed to coordinate presentation of the enhancing content (supplemental content) with the streaming content (program content). However, Shoff does not explicitly discloses forming announcements containing information specifying a time at which to receive upcoming triggers, monitoring the second address to receive the announcements; filtering the announcement to retain selected announcements; monitoring the first address at the time specified in the selected announcements to receive the triggers.

Birdwell discloses announcement servers generate announcements containing information specifying how associated upcoming transmissions are to be delivered over the broadcast network, the announcements contain such information as a broadcast locator, an identity of the content server that will be serving the data for the transmission, a time of transmission, a broadcast protocol. The announcement server makes the announcements available to the clients over the broadcast networks on a reserved multicast address or over a secondary link other than the broadcast network (col. 1, line 60+). The clients receive the announcements via the secondary link by, for example, monitoring the multicast address (using an announcement listener 60- figure 2) or occasionally accessing the Web site (col. 2, line 6+). The client filters the announcements, using filters 62-figure 2) according to predetermined criteria, keeping the announcements satisfying the criteria and discarding the rest. For the announcements that are kept as being of interest, the client searches them to extract the broadcast protocol, broadcast locator, transmission time, and any other information pertaining to retrieval of the broadcast transmission. The client tunes a broadcast receiver to the broadcast locator and launches a receiving application to receive the transmission according to the broadcast protocol (figure 2, col. 2, line 18+). Necessarily, the method comprising: forming announcements (by announcement servers) containing information specifying a time at which to receive upcoming triggers (transmission data), monitoring the second address (using announcement listener 60) to receive the announcements; filtering the announcement (using filters 62) to retain selected

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announcements; monitoring the first address at the time specified in the selected announcements to receive the triggers (tune broadcast receiver to the broadcast locator and launch a receiving application to receive the transmission). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shoff to incorporate the features as taught by Birdwell in order to increase security of the receiver.

Regarding claim 10, Birdwell teaches forming comprises the step of creating an announcement to contain parameters selected from a group comprising: a broadcast locator, a time when a corresponding trigger is to be broadcast, a broadcast protocol, (see col.1, line 60+).

Regarding claim 11, Shoff in view of Birdwell teaches a method as discussed in the rejection of claim 9. Shoff further teaches the processing comprises receiving the enhancing content according to a predetermined protocol (in data structure – figure 3) and storing the enhancing content (in supplemental content database – figures 2, 6-7).

Regarding claim 12, Shoff in view of Birdwell teaches a method as discussed in the rejection of claim 9. Shoff further discloses the supplemental content is constructed as a hypertext document, which can be rendered by a browser. For creating hypermedia content, WWW documents utilize a subset of SGML called “HTML”. Tags or markup codes, contained in HTML textual document, tell Web browsers how to render and print

documents, and are also used to specify hyperlinks (col. 12, line 48+). Necessarily, the processing comprises navigating within a container HTML page.

Regarding claim 13, Shoff teaches the processing comprises invoking a script within a container HTML page (col. 12, line 61+).

Regarding claim 15, Shoff et al. teaches delivering the streaming content, the enhancing content, and the triggers from a same source (see figure 2).

Regarding claim 16, Shoff et al. teaches delivering the enhancing content from a first source and delivering the streaming content and the triggers from a second source different from the first source (see figure 4).

Regarding claim 17, Shoff et al. teaches displaying the enhancing content together with the streaming content (see figures 8a-8c).

Regarding claim 19, the limitations of claim direct toward embody the method of claim 9 in a "computer readable medium". It would have been obvious to embody the procedure of Shoff and Birdwell discussed with respect to claim 9 in a "computer readable medium" in order that a processor could automatically perform the instruction.

Regarding claim 20, Shoff et al. discloses a method comprising:

displaying streaming content (see figure 6);  
storing the selected announcement (data structure 48 - figure 9);  
monitoring the trigger address at the time specified in the selected announcements to receive corresponding triggers; and processing the triggers to cause receiving one or more data files having the enhancing content (see figures 3, 6,7). However, Shoff does not specifically disclose monitoring an announcement address to receive announcement; the announcement containing information that specify times at which to receive upcoming triggers; filtering the announcements to retain selected announcements.

Birdwell discloses announcement servers generate announcements containing information specifying how associated upcoming transmissions are to be delivered over the broadcast network, the announcements contain such information as a broadcast locator, an identity of the content server that will be serving the data for the transmission, a time of transmission, a broadcast protocol. The announcement server makes the announcements available to the clients over the broadcast networks on a reserved multicast address or over a secondary link other than the broadcast network (col. 1, line 60+). The clients receive the announcements via the secondary link by, for example, monitoring the multicast address (using an announcement listener 60- figure 2) or occasionally accessing the Web site (col. 2, line 6+). The client filters the announcements, using filters 62-figure 2) according to predetermined criteria, keeping the announcements satisfying the criteria and discarding the rest. For the announcements that are kept as being of interest, the client searches them to extract

the broadcast protocol, broadcast locator, transmission time, and any other information pertaining to retrieval of the broadcast transmission. The client tunes a broadcast receiver to the broadcast locator and launches a receiving application to receive the transmission according to the broadcast protocol (figure 2, col. 2, line 18+). Necessarily, the method comprising: monitoring an announcement address (using announcement listener 60 – figure 2) to receive announcement pertaining to enhancing content, the announcement containing information that specify trigger address and times at which to receive upcoming triggers (broadcast locator, time of transmission, identity of content server that will be serving the data for the transmission, etc.); filtering the announcements (using filters 62-figure 2) to retain selected announcements. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shoff to use the teaching as taught by Birdwell in order to improve security at the receiver, notify user in advance the time to activate the enhancing content thereby improve efficiency in services.

Regarding claim 21, Shoff et al. teaches caching the data files (see figures 2, 9, col. 7, line 1+).

Regarding claim 22, Shoff et al. teaches presenting the streaming content and enhancing content using an HTML page (see col. 12, line 48+).

Regarding claim 23, Shoff discloses the computing unit can automatically activate the target resource, the target resource contain digital data which supports interactively functionality in conjunction with the associated video content program. The digital data defines a display layout prescribing how the supplemental content and the video program are to appear in relation to one another when displayed on the screen (col. 9, line 62+). Necessarily, the method comprising: using information from the trigger to invoke a script (e.g. hyperlink, icon); and executing the script to enhance the streaming content (e.g. activate the hyperlink, icon, etc. to display supplemental content with program content).

Regarding claim 25, the limitations of claim direct toward embody the method of claim 20 in a “computer readable medium”. It would have been obvious to embody the procedure of Shoff and Birdwell as discussed with respect to claim 20 in a “computer readable medium” in order that a processor could automatically perform the instruction.

Regarding claim 28, the claim is broader in scope than claim 20. The limitations of claim direct toward embody the method of claim 20 in a “computer readable medium”. It would have been obvious to embody the procedure of Shoff and Birdwell as discussed with respect to claim 20 in a “computer readable medium” in order that a processor could automatically perform the instruction.

Regarding claim 30, Shoff et al. discloses a system for synchronizing streaming content with enhancing content, the system comprising: server 22 for providing program content, program information, and supplemental content to viewer computing unit 62 (figure 4). The computing unit receives data structure 48 that contains program information and target specification, such as program titles, actor names, scheduled time of the program, the network name, pointers to storage locations within the media server, target resources supporting the supplemental content, etc. (figure 3 and col. 5, line 60+). The viewer computing unit receives program content and determines if the program is interactive, according to information in data structure 48. If the program is interactive, the viewer computing unit automatically activate the target resource. The target resource contains digital data which supports interactive functionality in conjunction with the associated video content program. The digital data defines the supplemental content to enable viewer interactivity with the video content program (col. 9, line 60+). Thus, the content server as claimed is met by head end 22; the client as claimed is met by the viewer computing unit 62; the content server sending the announcements by at least one of broadcasting and multicasting to the client; the client being configured to receive the announcements; the client processing the triggers to coordinate presentation of the enhancing content with the streaming content (see figures 8c). However, Shoff does not specifically disclose the content server being configured to form announcements that contain information specifying an IP address and a time at which to receive upcoming triggers; the client being configured to monitor the IP address at the time specified in the announcements to receive the triggers

Birdwell teaches the content server being configured to form announcements that contain information specifying an IP address and a time at which to receive upcoming triggers (col. 1, line 62+); the client being configured to monitor the IP address at the time specified in the announcements to receive the triggers (figure 2 and col. 4, line 66+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shoff to use the teaching as taught by Birdwell in order to improve security to the system, to notify user in advance the time to activate the enhancing content thereby increase efficiency for system.

Regarding claim 31, the elements of the system being claimed correspond to the elements of the method being claimed in claim 10, and are analyzed as discussed with respect to the rejection of claim 10.

Regarding claim 32, Shoff et al. discloses the client receives the enhancing content according to a predetermined protocol and caches the enhancing content (see figures 5, 9, col. 7, line 5+).

Regarding claims 33-36, the limitations of the system as claimed correspond to the limitations of the method as claimed in claims 12-13, 15-16, and are analyzed as discussed with respect to the rejection of claims 12-13, 15-16.

Regarding to claim 38, Shoff discloses receiving data structure from the head end, the data structure contains information of the upcoming enhancing content and streaming content as well as the IP address (see figure 3). When the viewer tunes to a particular channel, the viewer-computing unit consults the EPG to determine if the present program is interactive. If it is, the viewer computing-unit launches an interactive support module, such as an Internet browser. This browser is kept in memory and is dynamically loadable for execution on the processor when the viewer tunes to a channel carrying a video content program that the EPG identifies as interactive. The supplemental content can be automatically displayed in response to launching the Internet browser. The target resource contains enhancing supplemental content and display layout instruction prescribing how the supplemental content and the video content program are to appear in relation to one another when displayed on the television (see col. 3, line 14+). Necessarily, video content is played by a video control (e.g. processor, operation system, browser – figure 5); announcements (data structure 48) pertaining to enhancing content (supplemental content) for enhancing the video content (program content) is received, the announcements containing information taht specify a trigger IP address (e.g. URL – figure 3) and times at which to receive upcoming triggers (col. 9, line 62+); a rendering component (screen) to present the video content and to enhance the video content with the enhancing content according to instruction received in the triggers (col. 9, line 62+). However, Shoff does not specifically disclose a listener to monitor an announcement IP address to receive announcements,

the listener further monitoring the trigger IP address at the times specified by the announcements to receive corresponding triggers;

Birdwell discloses announcement servers generate announcements. the announcements contain information such as a broadcast locator (e.g., URL on the Web, a broadcast channel, etc.), an identity of the content server that will be serving the data for transmission, a time of transmission, a broadcast protocol, etc. (col. 1, line 62+). The announcements listener 60 executes in background to listen for announcements. The announcements received by the announcements listener 60 are passed onto the filter (s) 62 (col. 4, line 66+). The announcement listener 60 is configured to listen to the multicast address and destination port. The announcement listener 60 searches the announcements for the broadcast protocol. The launched receiving application 64 sends tuning information to the tuner 56 to tune the receiver 58 to the appropriate broadcast frequency specified in the announcement. At the stipulated broadcast time following the announcement, the announcement server begins serving the content to the client via broadcast server (col. 5, line 10+). Thus, the announcement listener 60 meets the claimed listener. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shoff to use the teaching as taught by Birdwell in order to improve security for the system, and provide information for upcoming event to viewer thereby improve quality in services.

Regarding claim 39, Shoff in view of Birdwell teaches a system as discussed in the rejection of claim 38. Birdwell further discloses program memory 46 comprises announcement listener 60, filter(s) 62, receiving application 64 (figure 2). The filter (s) 62 retain the announcements of the interest (col. 5, line 30+). Necessarily, the client software architecture comprises storage for hold the announcements in correlation with the identity of the video content.

Regarding claim 40, Shoff et al. further discloses the supplemental content is accessed via disk reads to the local storage drive. The supplemental content is synchronized with the program using open loop control; such as a start time followed by measurable ticks by frame count (col. 7, line 60+). Necessarily, the software architecture comprises a cache to hold the enhancing content before it is synchronized with program content and displayed on the screen.

Regarding claim 41, Birdwell teaches the listener (60) and video control (receiving application 64) are contained with a page rendered by the rendering component (program memory – figure 2). Birdwell does not specifically disclose HTML page. Shoff teaches HTML page (col. 12, line 60+). Therefore, it would have been obvious to use HTML page in order to modify the data in the page easily.

Regarding claim 42, Shoff teaches the HTML page also has one or more scripts to process the instructions contained in the triggers (col. 12, line 61+).

5. Claims 7, 18, 24, 26-27, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoff et al. (US 6,240,555) and in view of Birdwell et al. (US 6,108,706), and further in view of Nawaz et al. (US 6,421,694).

Regarding claim 7, Shoff in view of Birdwell teaches a method as discussed in the rejection of claim 1. However, neither Shoff nor Birdwell specifically discloses displaying the enhancing content as a ticker.

Nawaz teaches displaying the enhancing content as a ticker (see figure 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shoff and Birdwell to use the teaching as taught by Nawaz in order to display multiple enhancing contents at a predetermined limited space on screen.

Regarding claim 18, Shoff in view of Birdwell teaches a method as discussed in the rejection of claim 9. However, neither Shoff nor Birdwell specifically discloses enhancing content comprises a ticker; delivery triggers that contain items for the ticker; displaying the ticker together with the streaming content; and presenting the items from the triggers within the ticker.

Nawaz teaches enhancing content comprises a ticker; displaying the ticker together with the streaming content wherein streaming content is displayed in window 108; delivery

triggers that contain items for the ticker and presenting the items from the triggers within the ticker (see figure 3, col. 7, line 44-col. 8, line 23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shoff and Birdwell to use the teaching as taught by Nawaz in order to display multiple items at a predetermined limited space on screen.

Regarding claim 24, Shoff in view of Birdwell teaches a method as discussed in the rejection of claim 20. However, neither Shoff nor Birdwell specifically discloses receiving triggers that contain items for a ticker; displaying the ticker together with the streaming content; and presenting the items from the triggers within the ticker.

Nawaz teaches receiving triggers that contain items for a ticker; displaying the ticker together with the streaming content wherein streaming content is displayed in window 108; delivery triggers that contain items for the ticker and presenting the items from the triggers within the ticker (see figure 3, col. 7, line 44-col. 8, line 23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shoff and Birdwell to use the teaching as taught by Nawaz in order to display multiple enhancing contents at a predetermined limited space on screen

Regarding claim 26, Shoff teaches a method comprising:  
monitoring an address to receive triggers in synchronization with a streaming content, wherein enhancing content is associated with the streaming content (when the viewer

tunes to particular channel, the viewer computing unit consults the EPG to determine if the present program is interactive. If it is, the computing unit launches an interactive support module, and automatically activate the target resource to display supplemental with program content – col. 3, line 14+); receiving an announcement (data structure 48 – figure 3) on a monitored address containing information specifying how to receive upcoming enhancing content wherein each of trigger contain at least one item to be displayed (e.g. locate URLs to receive supplemental content, each of triggers contain an item –e.g. hyperlink or icon – figures 3, 8). However, Shoff does not specifically disclose monitoring an IP address, and the announcement containing information specifying when to receive upcoming enhancing content; a ticker for displaying items; forming an array of the items received in the triggers; and displaying the array of the items within the ticker.

Birdwell teaches monitoring an IP address to receive triggers (col. 2, line 6+), and the announcement containing information specifying how and when to receive upcoming transmission data (col. 1, line 65+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shoff to use the teaching as taught by Birdwell in order to improve efficiency in receiving data. However, neither Shoff nor Birdwell specifically discloses a ticker for displaying items; forming an array of the items received in the triggers; and displaying the array of the items within the ticker.

Nawaz discloses plurality of items is displayed in ticker pane as an array (figure 3 and col. 7, line 35+). Necessarily, the method comprising at least an item to be displayed on a ticker (ticker pane 142); forming an array of the items received in the triggers, and displaying the array of the items within the ticker. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shoff and Birdwell to use the teaching as taught by Nawaz in order to display multiple items at a predetermined limited space on screen.

Regarding claim 27, Birdwell teaches receiving announcements at another IP address (via secondary link 32 – figure 1 and col. 4, line 1+), the announcements being used to announce upcoming transmission of the triggers (col. 1, line 51+).

Regarding claim 37, Shoff in view of Birdwell teaches a method as discussed in the rejection of claim 30. However, neither Shoff nor Birdwell specifically discloses the triggers contain items for a ticker and the client display the ticker together with the streaming content.

Nawaz teaches the triggers contain items for a ticker and the client display the ticker together with the streaming content (see figure 3, col. 7, line 44-col. 8, line 23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shoff and Birdwell to use the teaching as taught by

Nawaz in order to display multiple enhancing contents at a predetermined limited space on screen.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shoff et al. (US 6,240,555) and in view of Birdwell et al. (US 6,108,706) as applied to claim 9 above, and further in view of Kate (WO 98/53611).

Regarding claim 14, Shoff in view of Birdwell teaches a method as discussed in the rejection of claim 9. However, neither Shoff nor Birdwell specifically discloses sending the enhancing content together with the triggers.

Kate teaches sending the enhancing content (e.g., Web, TOC) together with the triggers (T) – (Triggers, Web and table of content are multiplexed and transmitted to receiver see figures 1, 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shoff and Birdwell to use the teaching as taught by Kate in order to display enhancing content at predetermined time accurately.

7. Claims 29 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birdwell et al. (US 6,108,706), and in view of Nawaz et al. (US 6,421,694).

Regarding claim 29, Birdwell discloses announcement listener monitoring IP addresses to receive upcoming transmission data (col. 6, line 16+). The listener passes received announcements to filter(2), the filter(s) examines each announcement for match against

a list of data transmission in which the user is interested. The filter(s) retain the announcements of interest, and discard the rest. The selected announcements are passes to the receiving application 64, which understands the transmission protocol of the broadcast transmission. The receiving application 64 is launched in a timely manner before the scheduled broadcast and receives the data transmission from the broadcast receiver 54 and tuner 56- col. 5, line 15+). Necessarily, the computer readable system having computer executable instruction for performing: monitoring an IP address to receive enhancing content (monitoring IP address to receive upcoming transmission data), wherein the enhancing content is received according to instruction contained in the announcements (col. 2, line 18+), wherein the enhancing content comprises triggers, each trigger containing at least one item. However, Birdwell does not specifically disclose presenting a ticker that contains the items.

Nawaz teaches presenting a ticker (ticker pane 142 – figure 3) that contains the items. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Birdwell to use the teaching as taught by Nawaz in order to display multiple enhancing contents at a predetermined limited space on screen.

Regarding claim 43, Birdwell discloses announcement listener monitoring IP addresses to receive upcoming transmission data (col. 6, line 16+). The listener passes received announcements to filter(2), the filter(s) examines each announcement for match against a list of data transmission in which the user is interested. The filter(s) retain the announcements of interest, and discard the rest. The selected announcements are

passes to the receiving application 64, which understands the transmission protocol of the broadcast transmission. The receiving application 64 is launched in a timely manner before the scheduled broadcast and receives the data transmission from the broadcast receiver 54 and tuner 56- col. 5, line 15+). Necessarily, the client software architecture, comprising:

a first code segment for monitoring a broadcast or multicast IP address to receive enhancing content including triggers according to information contained in an announcement, wherein each trigger contains at least one item for a display. However, Birdwell does not specifically disclose a ticker and a second code segment for rendering the ticker with the items received via the triggers.

Nawaz discloses plurality of items as displayed on ticker pane 142 (figure 3 and col. 7, line 35+). Necessarily, each trigger contains at least one item for a ticker; and a second code segment for rendering the ticker with the items received via the triggers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Birdwell to use the teaching as taught by Nawaz in order to display multiple enhancing contents at a predetermined limited space on screen.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Knudson et al. (US 6,536,041) teaches program guide system with real time data sources.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P Huynh whose telephone number is 703-305-1889. The examiner can normally be reached on 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son P. Huynh  
May 19 2004



A handwritten signature in black ink, appearing to read "Son P. Huynh". Below the signature, the name is printed in capital letters: "TRAI TRAN" on the top line and "PATENT EXAMINER" on the bottom line.